



PTO/SB/21 (09-04)

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Total Number of Pages in This Submission

Application Number	09/718,868
Filing Date	11/20/2000
First Named Inventor	Ort et al.
Art Unit	2672
Examiner Name	Wang, Jin Chen
Attorney Docket Number	112076-138352

ENCLOSURES (Check all that apply)

<input checked="" type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> After Allowance Communication to TC
<input checked="" type="checkbox"/> Fee Attached	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Amendment/Reply	<input type="checkbox"/> Petition	<input checked="" type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)
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<input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	Schwabe, Williamson & Wyatt, P.C.		
Signature			
Printed name	Aloysius T.C. AuYeung		
Date	Ocotober 4, 2004	Reg. No.	35,432

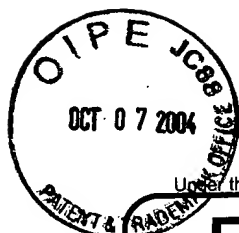
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PTO/SB/17 (10-04)
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Effective 10/01/2004. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT

(\$)

Complete if Known

Application Number	09/718,868
Filing Date	11/20/2000
First Named Inventor	Ort et al.
Examiner Name	Wang, Jin Chen
Art Unit	2672
Attorney Docket No.	112076-138352

METHOD OF PAYMENT (check all that apply)

☒ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None

☒ Deposit Account:

Deposit
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Deposit
Account
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500393

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☐ Charge fee(s) indicated below ☐ Credit any overpayments

☒ Charge any additional fee(s) or any underpayment of fee(s)

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FEE CALCULATION

1. BASIC FILING FEE

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1001	790	2001	395	Utility filing fee	
1002	350	2002	175	Design filing fee	
1003	550	2003	275	Plant filing fee	
1004	790	2004	395	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	
SUBTOTAL (1)					(\$)

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

		Extra Claims		Fee from below		Fee Paid
Total Claims	<input type="text"/>	-20** =	<input type="text"/>	X	<input type="text"/>	<input type="text"/>
Independent Claims	<input type="text"/>	-3** =	<input type="text"/>	X	<input type="text"/>	<input type="text"/>
Multiple Dependent	<input type="text"/>				<input type="text"/>	<input type="text"/>

Large Entity		Small Entity		Fee Description
Fee Code	Fee (\$)	Fee Code	Fee (\$)	
1202	18	2202	9	Claims in excess of 20
1201	88	2201	44	Independent claims in excess of 3
1203	300	2203	150	Multiple dependent claim, if not paid
1204	88	2204	44	** Reissue independent claims over original patent
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$)

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity

Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for <i>ex parte</i> reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	430	2252	215	Extension for reply within second month	
1253	980	2253	490	Extension for reply within third month	
1254	1,530	2254	765	Extension for reply within fourth month	
1255	2,080	2255	1,040	Extension for reply within fifth month	
1401	340	2401	170	Notice of Appeal	
1402	340	2402	170	Filing a brief in support of an appeal	340.00
1403	300	2403	150	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive - unavoidable	
1453	1,330	2453	665	Petition to revive - unintentional	
1501	1,370	2501	685	Utility issue fee (or reissue)	
1502	490	2502	245	Design issue fee	
1503	660	2503	330	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	790	2809	395	Filing a submission after final rejection (37 CFR 1.129(a))	
1810	790	2810	395	For each additional invention to be examined (37 CFR 1.129(b))	
1801	790	2801	395	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	

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*Reduced by Basic Filing Fee Paid

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SUBMITTED BY

Name (Print/Type) Aloysius T.C. AuYeung

Registration No.
(Attorney/Agent)

35.432

(Complete (if applicable))

Telephone 503 222 998

Signature

Date

October 4, 2004

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application for:

Ort et al

Application No.: 09/718,868

Filed: November 20, 2000

For: Technique for Displaying Non-
blocking Always Visible Displays
and Their Applications.

Examiner: Wang, Jin Cheng

Art Group: 2672

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Appellant's Brief Under 37 C.F.R. §1.192 In Support Of
Appellant's Appeal To The Board Of Patent Appeals And Interferences

Dear Sir:

The Appellants hereby submit this Brief in support of their appeal filed on August 3, 2004. The appeal arises from a final decision by the Examiner, mailed May 3, 2004. The final decision was in response to arguments filed on January 30, 2004, in response to an earlier office action, mailed Nov 3, 2003. Appellants respectfully request consideration of this appeal by the Board of Patent Appeals and Interferences for allowance of the present patent application.

(1) Real Party In Interest

The real party in interest is Hall Aluminum, LLC, having its primary place of business at 171 Main St. #271, Los Altos, California 94022.

(2) Related Appeals And Interferences

To the best of Appellants' knowledge, there are no appeals or interferences related to the present appeal, which will directly affect, be directly affected by, or have a bearing on the Board's decision.

(3) Status Of The Claims

Claims 1-13, 15-16, 18-19, 21-34, 36-37, 39-40 and 42 were pending and rejected in the Final Office Action dated May 3, 2003. On entry of the offered amendment and cancellation to reduce the number of issues on appeal, claims 1-10, 12-13, 15-16, 18-19, 21-31, 33-34, 36-37, 39-40 and 42 are pending, and are reproduced, as pending, in Appendix A.

(4) Status of Amendments

To reduce the number of issues on appeal, amendments are being offered for claims 10 and 31 in conjunction with cancellation of claims 11 and 32. The offered amendments incorporate respectively, all limitations previously recited in claims 11 and 32 into claims 10 and 31. Since claims 11 and 32 were previously pending, and no new matters are being introduced, no new searches are required, and no new issues are being raised.

(5) Summary of the invention

The present invention provides a novel method for generating non-blocking always visible displays. Embodiments of the present invention effectuate the desired displays by

- copying and saving pixel values (P1) corresponding to a display screen area;
- blending the copied pixel values (P1) with another set of pixel values (P2) to generate a set of blended pixel values (P3); and
- replacing the original pixel values (P1) with the blended pixel values (P3).

Embodiments of the present invention further sustain the desired display by

- monitoring for display operations that impact the display screen area;
- upon detection of such a display operation, replacing the blended pixel values (P3) with the original pre-blending pixel values (P1);
- upon completion of the detected operation, copying and saving the new modified pixel values (P4) of the display screen area;
- blending the copied new modified pixel values (P4) with the blending pixel values (P2) to generate new blended pixel values (P5);
- replacing the new modified pixel values (P4) with the new blended pixel values (P5).

(6) Issues Presented

- I. Whether Claims 1-10, 12-13, 15-16, 18, 22-31, 33-34, 36-37 and 39 are patentable under 35 U.S.C. §102.
- II. Whether Claims 19, 21, 40 and 42 are patentable under 35 U.S.C. §103

(7) Grouping of claims

For purposes of this appeal, based on the above listed grounds of rejection, all claims 1-10, 12-13, 15-16, 18-19, 21-31, 33-34, 36-37, 39-40, and 42 stand or fall together.

(8) Arguments

Rejection of claims 1-10, 12-13, 15-16, 18, 22-31, 33-34, 36-37 and 39 under 35 U.S.C. §102 was improper because Gough failed to teach each and every limitation.

As discussed in detail below, Gough failed to teach at least the required limitation of ***replacing blended pixel values with saved pre-blend pixel values***.

It is well settled that anticipation under 35 U.S.C. §102 requires the disclosure in a single piece of prior art to teach **each and every** limitation of a claimed invention. *Electro Med. Sys. S.A. v. Cooper Life Sciences*, 34 F.3d 1048, 1052, 32 USPQ2d 1017, 1019 (Fed. Cir. 1994). Thus, to anticipate the present invention, *Gough* must disclose every element recited in the pending claims.

Claim 1 recites as follows:

1. A method comprising:
 - copying and saving first pixel values corresponding to a first display screen area;
 - blending the copied first pixel values with second pixel values to generate third pixel values;
 - replacing the original first pixel values with the third pixel values to effectuate display of a non-blocking always visible display;
 - monitoring for display operations that impact the first display screen area;

upon detection of such a display operation, replacing said third pixel values with said first pixel values using said saved first pixel values;

upon completion of the detected operation, copying and saving fourth pixel values corresponding to the first display screen area;

blending the copied fourth pixel values with said second pixel values to generate fifth pixel values;

replacing the original fourth pixel values with the fifth pixel values to sustain the non-blocking always visible characteristic of the non-blocking always visible display (emphasis added).

Accordingly, to achieve the desired non-blocking visible display of the present invention, claim 1 first requires

(a) first pixel values of a display screen area is copied and saved away;

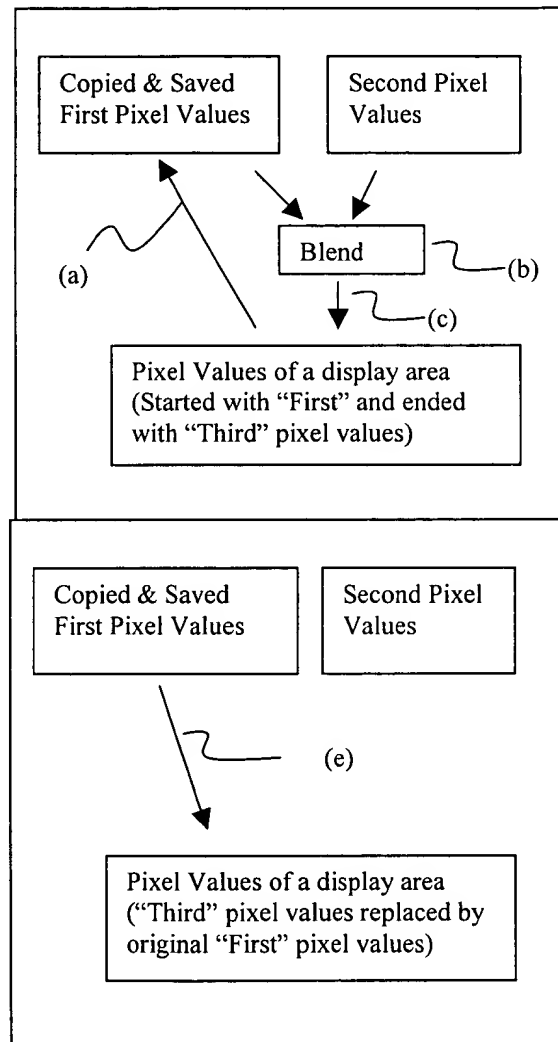
(b) the copied first pixel values are blended with second pixel values to produce third pixel values,

(c) the original first pixel values are then replaced by the third pixel values to effectuate display of a non-blocking always visible display.

Claim 1 then further requires that

- (d) display interactions that impact the particular display screen are monitored, and

- (e) on detection, the third pixel values (i.e. the blended pixel values) are replaced by the saved first pixel values (i.e. the pre-blend pixel values)



Note that replacing the blended third pixel values with the original pre-blended pixel values is not just another pixel copy operation. The requirement represents

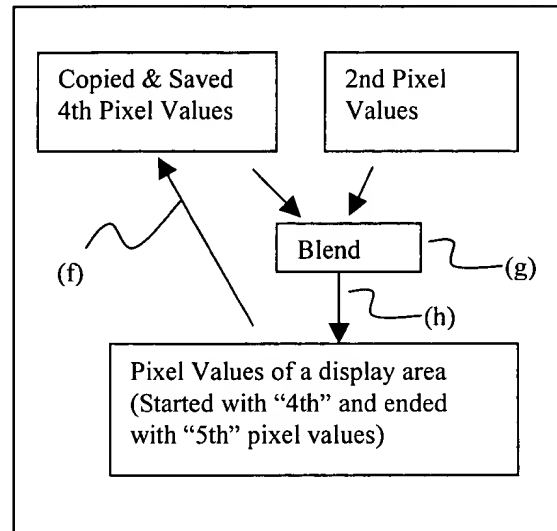
a unique and novel “swap back” approach, where blended pixel values are replaced by the saved pre-blend pixel values.

Claim 1 further recites,

(f) upon completion of the detected operation, copying and saving fourth pixel values corresponding to the first display screen area;

(g) blending the copied fourth pixel values with said second pixel values to generate fifth pixel values, and

(h) replacing the original fourth pixel values with the fifth pixel values to sustain the non-blocking always visible characteristic of the non-blocking always visible display.



In contrast, as evident from the discussion to follow, Gough teaches a different approach. Gough disclosed two embodiments of his approach, best illustrated by his Figure 5b, and Figure 9.

The essence of both embodiments is the same, and is best illustrated by Gough's disclosure, starting in col.12, lines 59, where Gough states

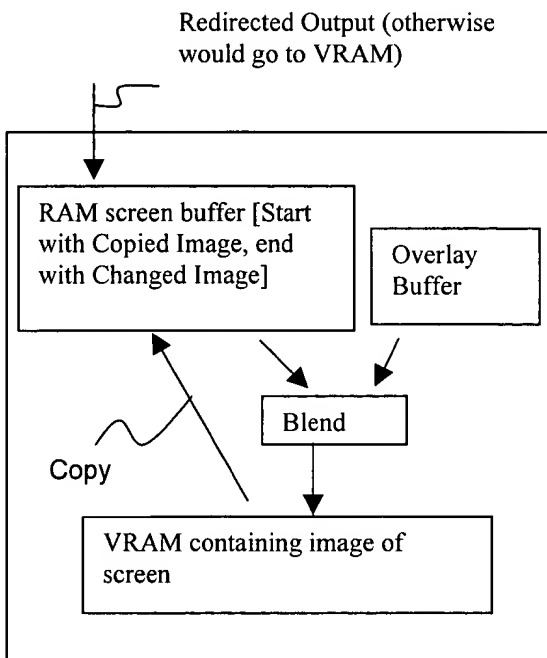
"Next, ... it is determined whether this is the first time that the application program 101 is drawing to the screen 60 after an overlay image has been produced. If it is, a step 126 creates an overlay buffer, and the image of the screen that is stored in the video RAM (VRAM) is copied from the system's VRAM to the RAM screen buffer

...

"Next, in step 128, the system is set such that future drawing output which is intended by the operating system, to go to VRAM, is sent to the RAM screen buffer of the present invention instead."

Then, after blending operation has been completed, the results of blending are loaded into VRAM ... to create the combined image (col. 12, lines 5-9).

The second embodiment differs only in that element 202 of Figure 9 is introduced, such that only the impacted portion of the display image is copied from VRAM to RAM for blending, and after blending, write back from RAM to VRAM; whereas, the first embodiment requires copy out and write back of the entire content of the VRAM.



Accordingly, Gough teaches a “**redirect**” approach, redirecting the output into the RAM buffer (as opposed to allowing the output to continue to go the VRAM buffer), Gough does not teach or suggest the recited required “**swap back**” of claim 1, ***replacing the prior blended result (third pixel values) with the pre-blend pixel values (first pixel values)***.

It further follows then because Gough does not employ the required “**swap back**” approach, Gough does not teach or suggest the recited required “monitoring” (so the “**swap back**” may take place).

The difference between Gough’s “**redirect**” approach and the present invention’s “**swap back**” approach is significant. Gough’s ***redirect*** approach can be implemented only as an enhancement to the operating system, whereas the ***swap back*** may be implemented as an enhancement to the operating system, or ***more importantly, independent of the operating system***.

In maintaining his rejection in the final office action as well as during the interview, the Examiner repeatedly reasoned that applicant’s ***swap back*** limitation is anticipated by Gough, relying on Gough’s teaching in col. 12, lines 1-17, which essence, according to the Examiner is the teaching of “copying of images between VRAM and RAM”.

Applicants agree with the Examiner that Gough teaches “copying of images between VRAM and RAM”. However, that’s not all Applicants’ ***swap back*** limitation requires. As discussed earlier, Applicant’s ***swap back*** limitation requires ***the replacement of the blended pixels with the saved away pre-blend original pixels***. In Gough’s case all writings from RAM to VRAM are newly blended images. Pre-blend image is copied out from VRAM to RAM only once, prior to the first blending operation, and this pre-blend image is never written back into VRAM. Thereafter, blending occurs in RAM without further requiring any copy out from VRAM, and the resulting newly blended image of each successive blending operation is written out from RAM to VRAM

to replace the prior blended image. As stated earlier, in Gough, pre-blended image is never written back from RAM to VRAM.

In view of the foregoing, Applicants respectfully submit claim 1 is patentable over Gough.

Claims 10, 13 and 16 contain similar “**swap back**” limitations as claim 1. Accordingly, for at least the same reasons, claims 10 and 13 are patentable over Gough.

Claims 22, 31, 34 and 37 are claims 1, 10, 13 and 16 in apparatus form. Accordingly, for at least the same reasons, claims 22, 31, 34 and 37 are patentable over Gough.

Claim 2-6, 12, 15, 18, 23-27, 33, 36 and 39 depend on claims 1, 10, 13, 16, 22, 31, 34 and 39 respectively, incorporating their limitations. Accordingly, claims 2-6, 12, 15, 18, 23-27, 33, 36 and 39 are patentable over Gough.

Rejections of claims 19, 21, 40 and 42 under 35 U.S.C. §103 were improper because Gough in combination with Jaaskelainen still fails to teach or suggest all required limitations.

Claim 19 contains similar “**swap back**” limitations of claim 1. Accordingly, for at least the same reasons claim 19 is patentable over Gough. Jasskelainen does not remedy the above discusses deficiency of Gough, therefore claim 19 is patentable over Gough even when combined with Jasskelainen.

Claim 40 is claim 19 in apparatus form. Accordingly, for at least the same reasons, claim 40 is patentable over Gough and Jasskelainen combined.

Claims 21 and 42 depend on claims 19 and 40, incorporating their limitations, therefore, for at least the same reasons, claims 21 and 42 are patentable over Gough and Jasskelainen combined.

(9) Conclusion

Appellants respectfully submit that all the appealed claims in this application are patentable and requests that the Board of Patent Appeals and Interferences overrule the Examiner and direct allowance of the rejected claims.

(10) Epilogue

This brief is submitted in triplicate, along with a check for ~~\$155~~ ^{\$340.00} to cover the filing of appeal brief fee for a small entity as specified in 37 C.F.R. §1.17(c). We do not believe any fees, in particular extension of time fees, are needed. However, should that be necessary, please charge our Deposit Account No. 500393.

In addition, please charge any shortages and credit any overages to Deposit Account No. 500393.

Respectfully submitted,
Appellant Applicant

Dated: October 4, 2004



By Aloysius AuYeung, Reg No. 35,432
Schwabe, Williamson & Wyatt, P.C.
Attorney for Appellant Applicant

Appendix A – Claims As Pending

1 1. (Original) A method comprising:

2 copying and saving first pixel values corresponding to a first display screen
3 area;

4 blending the copied first pixel values with second pixel values to generate
5 third pixel values;

6 replacing the original first pixel values with the third pixel values to effectuate
7 display of a non-blocking always visible display;

8 monitoring for display operations that impact the first display screen area;

9 upon detection of such a display operation, replacing said third pixel values
10 with said first pixel values using said saved first pixel values;

11 upon completion of the detected operation, copying and saving fourth pixel
12 values corresponding to the first display screen area;

13 blending the copied fourth pixel values with said second pixel values to
14 generate fifth pixel values;

15 replacing the original fourth pixel values with the fifth pixel values to sustain
16 the non-blocking always visible characteristic of the non-blocking always visible
17 display.

1 2. (Previously Amended) The method of claim 1, wherein the method further
2 comprises

3 marking a buffer holding said third/fifth pixel values changed; and

4 periodically checking to determine if said buffer has been marked changed.

- 1 3. (Original) The method of claim 1, wherein said monitoring comprises
2 intercepting invocations of display screen memory operations; and
3 determining if targeted display screen areas of the display screen memory
4 operations being invoked intersect with said first screen display area.
- 1 4. (Original) The method of claim 1, wherein the method further comprises
2 intercepting cursor events associated with said first display screen area; and
3 determining whether the cursor events are to be handled by an application
4 program associated with said non-blocking always visible display or an application
5 program associated with an underlying display window.
- 1 5. (Original) The method of claim 4, wherein each of said blending is performed in
2 accordance with a then current blending setting, and said determining comprises
3 determining if the current blending setting is greater than a predetermined threshold,
4 favoring contents of said non-blocking always visible display.
- 1 6. (Original) The method of claim 1, wherein said non-blocking always visible
2 display is a selected one of an on-line data monitor, a tool bar, a logo/mark, and an
3 animated assistant.
- 1 7. (Original) A method comprising:
2 copying and saving first pixel values corresponding to a first display screen
3 area;
4 blending the copied first pixel values with second pixel values corresponding
5 to a non-blocking always visible display to generate third pixel values;

6 replacing the original first pixel values with the third pixel values to effectuate
7 display of the non-blocking always visible display;
8 intercepting cursor events associated with said first display screen area; and
9 determining whether the cursor events are to be handled by an application
10 program associated with said non-blocking always visible display or an application
11 program associated with an underlying display window, based at least in part on a
12 current blending bias between said non-blocking always visible display and said
13 underlying display windows.

1 8. (Original) The method of claim 7, wherein said blending is performed in
2 accordance with a current blending setting, and said determining comprises
3 determining if the current blending setting is greater than a predetermined threshold,
4 favoring contents of said non-blocking always visible display.

1 9. (Original) The method of claim 7, wherein said non-blocking always visible
2 display is a selected one of an on-line data monitor, a tool bar, a logo/mark, and an
3 animated assistant.

1 10. (Currently Amended) A method comprising:
2 copying and saving first pixel values corresponding to a first display screen
3 area on which a non-blocking always visible on-line data monitor is to be rendered;
4 blending the copied first pixel values with second pixel values corresponding
5 to the non-blocking always visible on-line data monitor to generate third pixel values;
6 and

7 replacing the original first pixel values with the third pixel values to effectuate
8 display of the on-line data monitor with the non-blocking always visible attribute to
9 provide visual differentiation between said on-line data monitor and underlying
10 display windows associated with locally executed application programs;
11 monitoring for display operations that impact the first display screen area;
12 upon detection of such a display operation, replacing said third pixel values
13 with said first pixel values using said saved first pixel values;
14 upon completion of said display operation, copying and saving fourth pixel
15 values corresponding to the first display screen area;
16 blending the copied fourth pixel values with said second pixel values to
17 generate fifth pixel values; and
18 replacing the original fourth pixel values with the fifth pixel values to sustain
19 the non-blocking always visible characteristic of the on-line monitor.

1 11. (Cancelled) The method of claim 10, wherein the method further comprises
2 monitoring for display operations that impact the first display screen area;
3 upon detection of such a display operation, replacing said third pixel values
4 with said first pixel values using said saved first pixel values;
5 upon completion of said display operation, copying and saving fourth pixel
6 values corresponding to the first display screen area;
7 blending the copied fourth pixel values with said second pixel values to
8 generate fifth pixel values; and
9 replacing the original fourth pixel values with the fifth pixel values to sustain
10 the non-blocking always visible characteristic of the on-line monitor.

1 12. (Original) The method of claim 10, wherein the method further comprises
2 intercepting cursor events associated with said first display screen area; and
3 determining whether the cursor events are to be handled by an application
4 program associated with said non-blocking always visible on-line data monitor or an
5 application program associated with an underlying display window, based at least in
6 part on a current blending bias between said non-blocking always visible on-line
7 data monitor and underlying display windows.

1 13. (Previously Amended) A method comprising:
2 copying and saving first pixel values corresponding to a first display screen
3 area on which a non-blocking always visible task bar is to be rendered;
4 blending the copied first pixel values with second pixel values corresponding
5 to the non-blocking always visible task bar to generate third pixel values;
6 replacing the original first pixel values with the third pixel values to effectuate
7 display of the task bar with the non-blocking always visible attribute;
8 monitoring for display operations that impact the first display screen area;
9 upon detection of such a display operation, replacing said third pixel values
10 with said first pixel values using said saved first pixel values;
11 upon completion of said display operation, copying and saving fourth pixel
12 values corresponding to the first display screen area;
13 blending the copied fourth pixel values with said second pixel values to
14 generate fifth pixel values; and
15 replacing the original fourth pixel values with the fifth pixel values to sustain
16 the non-blocking always visible characteristic of the task bar.

1 14. (Previously Cancelled)

1 15. (Original) The method of claim 13, wherein the method further comprises
2 intercepting cursor events associated with said first display screen area; and
3 determining whether the cursor events are to be handled by an application
4 program associated with said non-blocking always visible task bar or an application
5 program associated with an underlying display window, based at least in part on a
6 current blending bias between said non-blocking always visible task bar and
7 underlying display windows.

1 16. (Previously Amended) A method comprising:
2 copying and saving first pixel values corresponding to a first display screen
3 area on which a non-blocking always visible logo/mark is to be rendered;
4 blending the copied first pixel values with second pixel values corresponding
5 to the non-blocking always visible logo/mark to generate third pixel values;
6 replacing the original first pixel values with the third pixel values to effectuate
7 display of the logo/mark with the non-blocking always visible attribute;
8 monitoring for display operations that impact the first display screen area;
9 upon detection of such a display operation, replacing said third pixel values
10 with said first pixel values using said saved first pixel values;
11 upon completion of said display operation, copying and saving fourth pixel
12 values corresponding to the first display screen area;
13 blending the copied fourth pixel values with said second pixel values to
14 generate fifth pixel values; and

15 replacing the original fourth pixel values with the fifth pixel values to sustain
16 the non-blocking always visible characteristic of the logo/mark.

1 17. (Previously Cancelled)

1 18. (Original) The method of claim 16, wherein the method further comprises
2 intercepting cursor events associated with said first display screen area; and
3 determining whether the cursor events are to be handled by an application
4 program associated with said non-blocking always visible logo/mark or an
5 application program associated with an underlying display window, based at least in
6 part on a current blending bias between said non-blocking always visible logo/mark
7 and underlying display windows.

1 19. (Previously Amended) A method comprising:
2 copying and saving first pixel values corresponding to a first display screen
3 area on which a non-blocking always visible animated assistant is to be rendered;
4 blending the copied first pixel values with second pixel values corresponding
5 to the non-blocking always visible animated assistant to generate third pixel values;
6 replacing the original first pixel values with the third pixel values to effectuate
7 display of the animated assistant with the non-blocking always visible attribute;
8 monitoring for display operations that impact the first display screen area;
9 upon detection of such a display operation, replacing said third pixel values
10 with said first pixel values using said saved first pixel values;
11 upon completion of said display operation, copying and saving fourth pixel
12 values corresponding to the first display screen area;

13 blending the copied fourth pixel values with said second pixel values to
14 generate fifth pixel values; and
15 replacing the original fourth pixel values with the fifth pixel values to sustain
16 the non-blocking always visible characteristic of the animated assistant.

1 20. (Previously Cancelled)

1 21. (Original) The method of claim 19, wherein the method further comprises
2 intercepting cursor events associated with said first display screen area; and
3 determining whether the cursor events are to be handled by an application
4 program associated with said non-blocking always visible animated assistant or an
5 application program associated with an underlying display window, based at least in
6 part on a current blending bias between said non-blocking always visible animated
7 assistant and underlying display windows.

1 22. (Original) An apparatus comprising:
2 storage medium having stored therein programming instructions designed to
3 copy and save first pixel values corresponding to a first display screen
4 area,
5 blend the copied first pixel values with second pixel values corresponding
6 to a non-blocking always visible display to generate third pixel values,
7 replace the original first pixel values with the third pixel values to
8 effectuate display of the non-blocking always visible display,
9 monitor for display operations that impact the first display screen area,

10 upon detection of such a display operation, replace said third pixel values
11 with said first pixel values using said saved first pixel values,
12 copy and save fourth pixel values corresponding to the first display screen
13 area,
14 blend the copied fourth pixel values with said second pixel values to
15 generate fifth pixel values,
16 replace the original fourth pixel values with the fifth pixel values to sustain
17 the non-blocking always visible characteristic of the non-blocking
18 always visible display; and
19 a processor coupled to the storage medium to execute the programming
20 instruction.

1 23. (Previously Amended) The apparatus of claim 22, wherein the programming
2 instructions are further designed to
3 mark a buffer holding said third/fifth pixel values changed, and
4 periodically check to determine if said buffer has been marked changed.

1 24. (Original) The apparatus of claim 22, wherein said programming instructions are
2 designed to
3 intercept invocations of display screen memory operations; and
4 determine if targeted display screen areas of the display screen memory
5 operations being invoked intersect with said first screen display area.

1 25. (Original) The apparatus of claim 22, wherein the programming instructions are
2 further designed to

3 intercept cursor events associated with said first display screen area, and
4 determine whether the cursor events are to be handled by an application
5 program associated with said non-blocking always visible display or an application
6 program associated with an underlying display window.

1 26. (Original) The apparatus of claim 25, wherein said programming instructions are
2 designed to perform each of said blending in accordance with a then current
3 blending setting, and perform said determine by determining if the current blending
4 setting is greater than a predetermined threshold, favoring contents of said non-
5 blocking always visible display.

1 27. (Original) The apparatus of claim 22, wherein said non-blocking always visible
2 display is a selected one of an on-line data monitor, a tool bar, a logo/mark, and an
3 animated assistant.

1 28. (Original) An apparatus comprising:
2 storage medium having stored therein programming instructions designed to
3 copy and save first pixel values corresponding to a first display screen
4 area,
5 blend the copied first pixel values with second pixel values corresponding
6 to a non-blocking always visible display to generate third pixel values,
7 replace the original first pixel values with the third pixel values to
8 effectuate display of the non-blocking always visible display,
9 intercept cursor events associated with said first display screen area, and

10 determine whether the cursor events are to be handled by an application
11 program associated with said non-blocking always visible display or an
12 application program associated with an underlying display window,
13 based at least in part on a current blending bias between said non-
14 blocking always visible display and said underlying display windows;
15 and
16 a processor coupled to the storage medium to execute the programming
17 instructions.

1 29. (Original) The apparatus of claim 28, wherein said programming instructions are
2 designed to perform said blend in accordance with a current blending setting, and
3 perform said determine by determining if the current blending setting is greater than
4 a predetermined threshold, favoring contents of said non-blocking always visible
5 display.

1 30. (Original) The apparatus of claim 28, wherein said non-blocking always visible
2 display is a selected one of an on-line data monitor, a tool bar, a logo/mark, and an
3 animated assistant.

1 31. (Currently Amended) An apparatus comprising:
2 storage medium having stored therein programming instructions designed to
3 copy and save first pixel values corresponding to a first display screen
4 area on which a non-blocking always visible on-line data monitor is to
5 be rendered;

6 blend the copied first pixel values with second pixel values corresponding
7 to the non-blocking always visible on-line data monitor to generate
8 third pixel values, and
9 replace the original first pixel values with the third pixel values to
10 effectuate display of the on-line data monitor with the non-blocking
11 always visible attribute to provide visual differentiation between said
12 on-line data monitor and underlying display windows associated with
13 locally executed application programs,
14 monitor for display operations that impact the first display screen area,
15 upon detection of such a display operation, replace said third pixel values
16 with said first pixel values using said saved first pixel values,
17 upon completion of said display operation, copy and save fourth pixel
18 values corresponding to the first display screen area,
19 blend the copied fourth pixel values with said second pixel values to
20 generate fifth pixel values, and
21 replace the original fourth pixel values with the fifth pixel values to sustain
22 the non-blocking always visible characteristic of the on-line monitor;
23 and
24 a processor coupled to the storage medium to execute the programming
25 instructions.

1 ~~32. (Cancelled) The apparatus of claim 31, wherein the programming instructions are~~
2 ~~further designed to~~
3 ~~monitor for display operations that impact the first display screen area,~~

4 ~~upon detection of such a display operation, replace said third pixel values with~~
5 ~~said first pixel values using said saved first pixel values,~~
6 ~~upon completion of said display operation, copy and save fourth pixel values~~
7 ~~corresponding to the first display screen area,~~
8 ~~blend the copied fourth pixel values with said second pixel values to generate~~
9 ~~fifth pixel values, and~~
10 ~~replace the original fourth pixel values with the fifth pixel values to sustain the~~
11 ~~non-blocking always visible characteristic of the on-line monitor.~~

1 33. (Original) The apparatus of claim 31, wherein the programming instructions are
2 further designed to
3 intercept cursor events associated with said first display screen area, and
4 determine whether the cursor events are to be handled by an application
5 program associated with said non-blocking always visible on-line data monitor or an
6 application program associated with an underlying display window, based at least in
7 part on a current blending bias between said non-blocking always visible on-line
8 data monitor and underlying display windows.

1 34. (Previously Amended) An apparatus comprising:
2 storage medium having stored therein programming instructions designed to
3 copy and save first pixel values corresponding to a first display screen
4 area on which a non-blocking always visible task bar is to be rendered.
5 blend the copied first pixel values with second pixel values corresponding
6 to the non-blocking always visible task bar to generate third pixel
7 values,

8 replace the original first pixel values with the third pixel values to
9 effectuate display of the task bar with the non-blocking always visible
10 attribute
11 monitor for display operations that impact the first display screen area,
12 upon detection of such a display operation, replace said third pixel values
13 with said first pixel values using said saved first pixel values,
14 upon completion of said display operation, copy and save fourth pixel
15 values corresponding to the first display screen area,
16 blend the copied fourth pixel values with said second pixel values to
17 generate fifth pixel values, and
18 replace the original fourth pixel values with the fifth pixel values to sustain
19 the non-blocking always visible characteristic of the task bar; and
20 a processor coupled to the storage medium to execute the programming
21 instructions.

1 35. (Cancelled)

1 36. (Original) The apparatus of claim 34, wherein the programming instructions are
2 further designed to
3 intercept cursor events associated with said first display screen area, and
4 determine whether the cursor events are to be handled by an application
5 program associated with said non-blocking always visible task bar or an application
6 program associated with an underlying display window, based at least in part on a
7 current blending bias between said non-blocking always visible task bar and
8 underlying display windows.

1 37. (Previously Amended) An apparatus comprising:
2 storage medium having stored therein programming instructions designed to
3 copy and save first pixel values corresponding to a first display screen
4 area on which a non-blocking always visible logo/mark is to be
5 rendered,
6 blend the copied first pixel values with second pixel values corresponding
7 to the non-blocking always visible logo/mark to generate third pixel
8 values,
9 replace the original first pixel values with the third pixel values to
10 effectuate display of the logo/mark with the non-blocking always visible
11 attribute,
12 monitor for display operations that impact the first display screen area,
13 upon detection of such a display operation, replace said third pixel values
14 with said first pixel values using said saved first pixel values,
15 upon completion of said display operation, copy and save fourth pixel
16 values corresponding to the first display screen area,
17 blend the copied fourth pixel values with said second pixel values to
18 generate fifth pixel values, and
19 replace the original fourth pixel values with the fifth pixel values to sustain
20 the non-blocking always visible characteristic of the logo/mark; and
21 a processor coupled to the storage medium to execute the programming
22 instructions.

1 38. (Cancelled) .

1 39. (Original) The apparatus of claim 37, wherein the programming instructions are
2 further designed to
3 intercept cursor events associated with said first display screen area; and
4 determine whether the cursor events are to be handled by an application
5 program associated with said non-blocking always visible logo/mark or an
6 application program associated with an underlying display window, based at least in
7 part on a current blending bias between said non-blocking always visible logo/mark
8 and underlying display windows.

1 40. (Previously Amended) An apparatus comprising:
2 storage medium having stored therein programming instructions designed to
3 copy and save first pixel values corresponding to a first display screen
4 area on which a non-blocking always visible animated assistant is to
5 be rendered,
6 blend the copied first pixel values with second pixel values corresponding
7 to the non-blocking always visible animated assistant to generate third
8 pixel values,
9 replace the original first pixel values with the third pixel values to
10 effectuate display of the animated assistant with the non-blocking
11 always visible attribute
12 monitor for display operations that impact the first display screen area,
13 upon detection of such a display operation, replace said third pixel values
14 with said first pixel values using said saved first pixel values,

15 upon completion of said display operation, copy and save fourth pixel
16 values corresponding to the first display screen area,
17 blend the copied fourth pixel values with said second pixel values to
18 generate fifth pixel values, and
19 replace the original fourth pixel values with the fifth pixel values to sustain
20 the non-blocking always visible characteristic of the animated
21 assistant; and
22 a processor coupled to the storage medium to execute the programming
23 instructions.

1 41. (Cancelled)

1 42. (Original) The apparatus of claim 40, wherein the programming instructions are
2 further designed to
3 intercept cursor events associated with said first display screen area, and
4 determine whether the cursor events are to be handled by an application
5 program associated with said non-blocking always visible animated assistant or an
6 application program associated with an underlying display window, based at least in
7 part on a current blending bias between said non-blocking always visible animated
8 assistant and underlying display windows.